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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,516	07/08/2003	Bruce Lightner	0307091.0158	9346
35602	7590	06/02/2004	EXAMINER	
STEPHEN C. GLAZIER KIRKPATRICK & LOCKHART LLP 1800 MASSACHUSETTS AVENUE, NW WASHINGTON, DC 20036			ZANELLI, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,516

Applicant(s)

LIGHTNER ET AL.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-144 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47 and 87 is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 58-70, 78, 79, 86, 89, 90, 93, 94, 100, 101, 107-111, 117, 119, 121, 122, 129, 133 and 139 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/17/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims rejected are 48-57,71-77,80-85,88,91,92,95-99,102-106,112-116,118,120,123-128,130-132,134-138 and 140-144.

DETAILED ACTION

1. This application is a Continuation of S.N. 09/908,440, filed 7/18/01. The preliminary amendment filed 7/8/03 has been entered.
2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-98 have been renumbered as 47-144 since the application as filed contained claims 1-46, which were "replaced" (cancelled) by the preliminary amendment noted above.

3. The IDS filed 9/17/03 has been considered.
4. Claims 101-126 are objected to because of the following informalities:
 - A. As per claims 101, 102, 117 and 118, at line 2 insert --said method-- before "comprising" since the body of the claim recites method steps.
 - B. All claims depending from an objected base claim are also objected to as containing the same deficiencies.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an

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application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 144 is rejected under 35 U.S.C. 102(b) as being anticipated by Mezger et al. (5,781,871).

A. As per claim 144, Mezger discloses a method of remotely monitoring a vehicle's emissions in which a vehicle onboard computer monitors vehicle operating parameters such as exhaust gas recirculation, misfiring, catalytic converters, etc. (col. 4, lines 5-20); the data is formatted into a data packet which is transmitted to a remote location (col. 3, lines 39-45); and the data is processed at the remote location to extract information such as vehicle type, manufacturer, model, etc. as well as the vehicle operating characteristics noted above.

7. Claim 144 is further rejected under 35 U.S.C. 102(e) as being anticipated by Lawrence et al. (6,505,106).

A. As per claim 144, Lawrence discloses monitoring vehicle operating parameters and transmitting the information via wireless means to a remote computer for analysis. The analyzed data may be related to the vehicle's emissions (col. 4, lines 30-51).

8. Claims 137 and 144 are rejected under 35 U.S.C. 102(e) as being anticipated by Nathanson (6,263,268).

A. As per claims 137 and 144, Nathanson discloses a system for remotely monitoring the operating parameters of a vehicle in which data is transmitted from an onboard computer via wireless means to a remote computer. The information may be

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monitored by a user connected to the Internet wherein the information may be related to exhaust emissions (col. 2, lines 31-35; col. 3, lines 20-23; col. 4, lines 4-41).

9. Claims 137 and 141-143 is rejected under 35 U.S.C. 102(e) as being anticipated by Schuyler (6,429,773).

A. As per claim 137, Schuyler discloses a system for remotely monitoring vehicle operating parameters via a web page. A user may monitor the vehicle using a computer connected to the Internet whereby the monitored parameters may include sensing emissions (Fig. 2; Abs.; col. 4, lines 51-59; col. 5, lines 60-64).

B. As per claim 141-143, as above wherein the information is viewed as a web page (Fig. 6) on a user computer connected to the Internet (col. 4, lines 51-59) whereby the information is transmitted from the vehicle via cellular telephone using standard protocols (Fig. 1).

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

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later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 48-57, 71-77, 80-85, 88, 91, 92, 95-99, 102-106, 112-116, 118, 120, 123-128, 130-132, 134-138 and 140-144 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. (6,295,492) in view of Smith et al. (5,671,141), Obradovich et al. (WO 00/40038) and Schuyler (*supra*).

A. As per claims 48, 88, 102, 118, 127, 132, 137 and 144, Lang discloses a system and method for collecting vehicle diagnostic data and transmitting the data to a remote location (Abs.). As shown in Fig. 1, vehicle data is obtained via the vehicle's OBD-II connector (8) and transmitted through a wireless modem (35) to a host computer system (60). Lang discloses transmitting various vehicle data including EPA-mandated diagnostic codes and diagnostic service codes (col. 2, lines 45-48). The system allows for real-time monitoring of the vehicle's emissions system by accessing the information through a remote computer (27). The claimed invention differs in that specific vehicle data is transmitted (i.e., diagnostic trouble codes, status of MIL and I/M readiness flag) and sending a communication describing the vehicle's emissions status. However, Lang does disclose transmitting EPA-mandated diagnostic codes and service codes and communicating the information upon request (*supra*).

B. Smith discloses in Fig. 2 various fault codes/flags used to report operational state of a vehicle's emissions system (col. 4, lines 30-34). The codes and flags provide status information of the emissions system including MIL and diagnostic codes (cols. 4-6). Smith further suggests providing the status information to an external computer

(col. 2, lines 3-5). One of ordinary skill in the art would have been motivated by this suggestion to combine the disclosed emissions status information with the wireless reporting system of Lang.

C. Obradovich discloses a system which uses "c-mail" (e-mail equivalent for a vehicle) to report vehicle operating characteristics, including emissions, to monitoring agencies (i.e., law enforcement) via wireless communication (Abs.; page 11, lines 24-26; page 15, lines 19-29). Warnings may be communicated to a vehicle owner notifying them that the vehicle's emissions do not meet certain standards. Schuyler performs similar monitoring and remote notification wherein the notification may be solicited or unsolicited by a remote location. Schuyler further suggests providing the information as a web page on the Internet. One of ordinary skill in the art would have found it obvious to include the notification (outputting) processes of Obradovich and Schuyler because it would have immediately alerted the owner of the emissions violation.

D. As per claims 49-53, 55, 56, 75-84, 91, 92, 96-99, 103-106, 115, 120, 124-126, 128, 131, 134-136, 138 and 140, as above wherein the monitored information may include vehicle emissions-related data whereby a user and/or other entity (third party) at a remote location is alerted as to whether the emissions are at acceptable/unacceptable levels (see Obradovich, Abs.; page 11, lines 24-26; page 15, lines 19-29 and Schuyler, col. 5, line 26 to col. 6, line 7).

E. As per claims 54, 57, 71-74, 112-114, 130 and 141-143, as above wherein the vehicle operating parameters are transmitted by wireless means (i.e. cellular telephone)

to a user at a remote location. The information may be presented as a web page on the Internet using standard communication protocols (Schuyler, *supra*). Since the information is transmitted to a remote computing device, such information may be stored for further analysis.

F. As per claims 85 and 116, as above wherein Schuyler suggests including location information provided by a GPS receiver (see Fig. 6).

G. As per claims 95 and 123, as above whereby the information transmitted over the wireless means is obtained from the vehicle's OBD-II connector (see Lang, Fig. 1).

13. Claims 47 and 87 are allowed.

14. Claims 101 and 117 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

15. Claims 58-70, 78, 79, 86, 89, 90, 93, 94, 100, 129, 133 and 139 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 107-111, 119, 121 and 122 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references are of general interest.

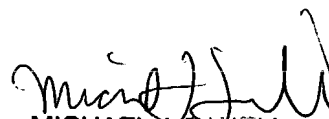
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (703) 305-9756.

The examiner can normally be reached on Monday-Thursday 5:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/mjz


MICHAEL J. ZANELLI
PRIMARY EXAMINER